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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/757,017

01/14/2004

Heinrich Kladders

01-1448

3319

28501

7590

12/24/2008

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EXAMINER

PATEL, NIHIR B

ART UNIT

PAPER NUMBER

3772

MAIL DATE

DELIVERY MODE

12/24/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/757,017	<b>Applicant(s)</b> KLADDERS ET AL.	
	<b>Examiner</b> NIHIR PATEL	<b>Art Unit</b> 3772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 and 16-20 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 7, 8, 10-13 and 15 is/are rejected.
- 7) ☒ Claim(s) 5, 6 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 16<sup>th</sup>, 2008 has been entered.

### *Response to Arguments*

2. Applicant's arguments with respect to claims 1 and 3-20 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims **1, 3, 4, 7, 8 10-13 and 15** are rejected under 35 U.S.C. 102(e) as being anticipated by Pui et al. (US 6,764,720).

5. **As to claim 1**, Pui teaches an apparatus that comprises an inlet side (**see figure 1**); and an outlet side (**see figure 1**), the outlet side including at least one nozzle opening (**see figure 1; col.**

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**6 lines 5-15**); wherein an outer surface of the outlet side includes at least one of elevation and/or depression microstructures and elevation and/or depression nanostructures, which do not include the at least one nozzle opening (**see figure 1; col. 6 lines 45-65**).

6. **As to claim 3**, Pui teaches an apparatus that comprises at least two nozzle openings oriented so that the jets of fluid emerging from them intersect (**see figure 2**).

7. **As to claim 4**, Pui teaches an apparatus wherein the nozzle is formed from at least two constructional units (**see figures 1 and 2**).

8. **As to claim 7**, Pui teaches an apparatus that comprises a nozzle having one or more nozzle openings and an outer surface at a fluid outlet side of the nozzle (**see figures 1 and 2**); a nozzle holder which comprises a through bore having a sidewall initiating at a position in communication with the one or more nozzle openings of the fluid outlet side of the nozzle (**see figure 2**), and terminating at an end face of the nozzle holder, wherein at least one of the following surfaces include at least one of elevation and/or depression microstructures and elevation and/or depression nanostructures, which do not include the one or more nozzle openings: the outer surface of the fluid outlet side of the nozzle, the outer surface of the end face of the nozzle holder, or the side wall of the through bore of the nozzle holder (**see figures 1 and 2; col. 6 lines 45-65**).

9. **As to claim 8**, Pui teaches an apparatus wherein the through bore of the nozzle holder widens out continuously from the one or more nozzle openings to the end face thereof (**see figure 2**).

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10. **As to claim 10**, Pui teaches an apparatus wherein a side of the through bore that is remote from the one or more nozzles openings includes at least one of microstructures and nanostructures (**see figure 2; col. 6 lines 45-65**).

11. **As to claim 11**, Pui teaches an apparatus wherein the nozzle comprises an outlet side and inlet side (**see figures 1 and 2**).

12. **As to claim 12**, Pui teaches an apparatus wherein the delivery device for fluids comprises a nozzle (**see figures 1 and 2**).

13. **As to claim 13**, Pui teaches an apparatus wherein the delivery device for fluid comprises a nozzle system (**see figures 1 and 2**).

14. **As to claim 15**, Pui teaches an apparatus wherein the device is an inhaler or atomizer for delivering medicinal or pharmaceutical fluids (**see col. 7**).

*Allowable Subject Matter*

15. Claims **9 and 16-20** are allowed. The prior art does not teach or suggest a check nut engaging the nozzle holder and having an end face and a bore including a side wall thereof, which communicates with the through-bore of the nozzle holder and widens out continuously therefrom, wherein at least one of an outer surface of the end face of the check nut and the side wall of the bore of the check nut include at least one of microstructures and nanostructures.

16. Claims **5, 6 and 14** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not disclose constructional units that comprise superimposed plates, at least one of the plates produced by microtechnology, so that

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the plates lying one on top of the other define, on one side, a fluid inlet connected to a channel system and/or a filter system which then opens into one or more fluid outlets.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIHIR PATEL whose telephone number is (571)272-4803. The examiner can normally be reached on 7:30 to 4:30 every other Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nihir Patel/  
Examiner, Art Unit 3772

/Patricia Bianco/

Supervisory Patent Examiner, Art Unit 3772

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